

SOME BEES FROM THE VICTORIAN ALPS

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Family COLLETIDAE

Paracolletes chalybeatus Er.

I have referred to this unsatisfactory species several females from Mount Buffalo, which differ from *P. stewarti* Raym.* by the following characters:

The area of the metathorax is duller, with a median depression, and the scale-like sculpture is coarse (more shining in *P. stewarti*) the pterostigma is very long and pale amber, and the nervures are lighter and paler (blackish and heavier in *stewarti*); pygidial plate smooth over a large area (covered with a close scale-like sculpture in *stewarti*). Serrations of hind calcar seven, coarse (finer in *stewarti* and five in number); hair of hind basitarsi pale straw (black in *stewarti*). The area of the metathorax has a sharply defined angle of truncation in *stewarti*, but *Chalybeatus* lacks this feature.

A series of females taken on flowers of "Burgan," *Kunzea peduncularis*.

Locality—Mackey's Lookout, Mount Buffalo, Vic. (alt. 3,500 feet), Jan. 8, 1948, H. C. E. Stewart.

Paracolletes stewarti Raym.

A series of females, not exactly typical, and appearing to approach *P. chalybeatus* Er. as defined above. It would seem that these intergrade.

On flowers of "Burgan."

Locality—Mackey's Lookout, Mount Buffalo, Vic., Jan. 9, 1948, H. C. E. Stewart.

Family ANDRENIDAE

Subfamily HALICTINAE

Halictus asperithorax Ckll.

Two typical females and a male; indistinguishable from specimens from Sandringham.

Locality—Reed's Lookout, Mount Buffalo, Vic., Jan. 7, 1948, H. C. E. Stewart.

Observed to spring the triggers of the Grass Trigger-plant, *Styidium graminifolium*.

Halictus gilesi Ckll.

One female.

Locality—View Point track, Mount Buffalo, Vic., Dec. 26, 1947, H. C. E. Stewart.

On flowers of Alpine Daisy, *Brachycome scapiformis*.

Parasphcodes wellingtoni Ckll.

A series of females.

Locality—Shore of Lake Catani, Mount Buffalo, Vic., Dec. 28, 1947, H. C. E. Stewart.

On flowers of *Brachycome scapiformis*.

Family CERATINIDAE

Exoneura montana Raym.

One typical female.

Locality—Mackey's Lookout, Mount Buffalo, Vic., Jan. 9, 1948 (alt. 3,500 feet), H. C. E. Stewart.

On flowers of "Burgan," *Kunzea peduncularis*.

**Pick. Nat.*, Vol. 64, No. 5, Sept. 1947, p. 102.

Family APIDAE
Subfamily APINAE

A worker bee of the hive, *Apis ligustrina* X *A. mellifera* Linn., is exceedingly hairy, probably a development suitable for the cold of the higher altitudes. Another feature was two large pieces of dry soil attached to the apex of the anterior wings, and which would seem to indicate a hive in the ground. The clods resembled large pterostigmata.

Locality—Mount Buffalo, Vic., Jan. 8, 1948, H. C. E. Stewart.

The collector observed the bee in the act of springing the style of the Grass Trigger-plant.

"STROKE A NETTLE"

Anyone who is sufficiently provoked by the stinging nettle to wish to find out the cause of his discomfort will be able, thanks to N. Emmelin and W. Feldberg [*J. Physiol.*, 1947, 106, 440], to obtain nearly a complete answer. The statement that the active principle of the nettle was formic acid has repeatedly appeared in print and become part of the lore belonging to the plant. It now appears that the juice of the nettle does not contain this substance in any measurable quantity. The facts are both more interesting than the fiction and more in keeping with contemporary biochemical research. It has been ascertained that the fluid in the hair of a nettle contains one part in a hundred of acetylcholine and between one part in five hundred and one part in a thousand of histamine. In the case of the former, the content of individual hairs could be pharmacologically estimated. Ten hairs from a stalk gave values ranging between 0.02 and 0.4 millionths of a gramme, with an average of 0.108. Hairs from the upper surface of leaves contained only about one-third as much. In so far as histamine is concerned it had been assumed in advance, not unreasonably, that the sting of a nettle hair would prove to be merely one more stimulus for the release of this substance from human tissues. Instead, the histamine came from the nettle, although it was necessary to pool the contents of some 15-30 hairs to obtain a measurable effect. Further, it was established by tests on human subjects that both the acetylcholine and the histamine are needed to provoke the typical reaction. Neither separately can produce the equivalent of a natural "sting." On the other hand indications were also obtained that nettle-hair juice produces a more marked effect than would be expected from its content of these two substances alone. It is suggested, therefore, that there is probably a third active principle, still unidentified but not formic acid.

WILD FLOWER PROTECTION IN SOUTH AFRICA

The following extract from the Transvaal newspaper *Spotlight* of May 7 is an illuminating commentary upon the type of work being undertaken to safeguard the floral wealth in a sister Dominion:

The Wild Flower Protection Committee, long handicapped by lack of effective machinery for the enforcement of the various wild flower protection ordinances, took the law into its own hands last August. With the blessing of the Commissioner of Police, a former police sergeant was commissioned as a special constable and let loose among the pillagers and vandals who have despoiled the Cape of so much of its natural beauty. He has so far recorded more than 200 convictions and the scale of fines has been raised. Not that this alone will act as a deterrent—hawkers do sufficiently well out of flowers to take the rap occasionally without having to scrape their pockets clear—but the mere knowledge that a full-time agent is roaming the countryside has inevitably tended to discourage indiscriminate picking of wild flowers.